WHAT IS CLAIMED IS:

[c01] A light source comprising:

a source of plasma discharge that emits electromagnetic ("EM") radiation, a portion of which has wavelengths shorter than about 200 nm; and

a phosphor composition that comprises a plurality of particles, each of said particles comprising at least a first phosphor and at least a second phosphor, said phosphor composition is disposed such that said first phosphor absorbs substantially said portion of EM radiation having wavelengths shorter than about 200 nm, and said first phosphor emits EM radiation having wavelengths longer than about 200 nm.

[c02] The light source according to claim 1, wherein said at least a first phosphor comprises a plurality of nanometer-sized particles disposed on a surface of a particle of said second phosphor.

[c03] The light source according to claim 1, wherein said at least a first phosphor forms a shell around each particle of said second phosphor.

[c04] The light source according to claim 2, wherein said source of plasma discharge is contained in a sealed housing.

[c05] The light source according to claim 2, wherein said source of plasma comprises mercury gas, which produces a plasma discharge upon application of a voltage across the mercury gas.

[c06] The light source according to claim 5, wherein said nanometer-sized particles of said at least a first phosphor have a size in a range from about 1 nm to about 500 nm.

[c07] The light source according to claim 5, wherein said nanometer-sized particles of said at least a first phosphor have a size in a range from about 1 nm to about 200 nm.

[c08] The light source according to claim 5, wherein said nanometer-sized particles of said at least a first phosphor have a size in a range from about 1 nm to about 100 nm.

[c09] The light source according to claim 5, wherein said particle of said at least a second phosphor have a size in a range from about 1 micrometers to about 6 micrometers.

[c10] The light source according to claim 5; wherein said at least a first phosphor is selected from the group consisting of $LaPO_4:Pr^{3+}$; $LaB_3O_6:Pr^{3+}$; $LaBO_3:Pr^{3+}$; $YBO_3:Pr^{3+}$; $GdBO_3:Pr^{3+}$; $LuBO_3:Pr^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+}$; $SrB_4O_7:Pr^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+}$; $YPO_4:Pr^{3+}$; $GdPO_4:Pr^{3+}$; $Y_2SiO_5:Pr^{3+}$; $YPO_4:Bi^{3+}$; $LuPO_4:Bi^{3+}$; $LaPO_4:Pb^{2+}$; $LaB_3O_6:Pb^{2+}$; $LaBO_3:Pb^{2+}$; $YBO_3:Pb^{2+}$; $GdBO_3:Pb^{2+}$; $LuBO_3:Pb^{2+}$; $(Gd,Y)B_3O_6:Pb^{2+}$; $(Sr,Ca)Al_{12}O_{19}:Pb^{2+}$; $(La,Gd,Y)MgB_5O_{10}:Pb^{2+}$; $SrB_4O_7:Pb^{2+}$; $CaMgAl_{11.33}O_{19}:Pb^{2+}$; $CaMgAl_{14}O_{23}:Pb^{2+}$; $YPO_4:Pb^{2+}$; $GdPO_4:Pb^{2+}$; $Y_2SiO_5:Pb^{2+}$; $YPO_4:Pb^{2+}$; $LuPO_4:Pb^{2+}$; $LaPO_4:Pr^{3+},Pb^{2+}$; $LaB_3O_6:Pr^{3+},Pb^{2+}$; $LaBO_3:Pr^{3+},Pb^{2+}$; $YBO_3:Pr^{3+},Pb^{2+}$; $GdBO_3:Pr^{3+},Pb^{2+}$; $LuBO_3:Pr^{3+},Pb^{2+}$; $(Gd,Y)B_3O_6:Pr^{3+},Pb^{2+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+},Pb^{2+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+},Pb^{2+}$; $SrB_4O_7:Pr^{3+},Pb^{2+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+},Pb^{2+}$; $CaMgAl_{14}O_{23}:Pr^{3+},Pb^{2+}$; $YPO_4:Pr^{3+},Pb^{2+}$; $GdPO_4:Pr^{3+},Pb^{2+}$; $Y_2SiO_5:Pr^{3+},Pb^{2+}$; $YPO_4:Bi^{3+},Pb^{2+}$; $LuPO_4:Bi^{3+},Pb^{2+}$; $LaPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $LaB_3O_6:Pr^{3+},Pb^{2+},Bi^{3+}$; $LaBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $YBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $GdBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $LuBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+},Pb^{2+},Bi^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+},Pb^{2+},Bi^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+},Pb^{2+},Bi^{3+}$; $SrB_4O_7:Pr^{3+},Pb^{2+},Bi^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+},Pb^{2+},Bi^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+},Pb^{2+},Bi^{3+}$; $YPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $GdPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $Y_2SiO_5:Pr^{3+},Pb^{2+},Bi^{3+}$; $YPO_4:Pr^{3+},Bi^{3+},Pb^{2+}$; $LuPO_4:Pr^{3+},Bi^{3+},Pb^{2+}$; $(Ca,Mg,Sr)SO_4:Pb^{2+}$; $CaLi_2SiO_4:Pb^{2+}$; $(Ca,Ba,Sr)SiO_3:Pb^{2+}$; $Ba(Y,Gd,Lu)B_9O_{16}:Bi^{3+}$; $YF_3:Bi^{3+}$; $YOF:Bi^{3+}$; $(Gd,Y)OF:Bi^{3+},Pr^{3+}$; $(Y,Gd)_3Al_5O_{12}:Bi^{3+}$; and combinations thereof.

[c11] The light source according to claim 10, wherein said nanometer-sized particles of said first phosphor is produced by a method selected from the group

consisting of flame spray pyrolysis, inverse-microemulsion, sol-gel, and colloidal suspension.

[c12] The light source according to claim 5; wherein said at least a first phosphor is selected from the group consisting of $LaPO_4:Pr^{3+}$; $LaB_3O_6:Pr^{3+}$; $LaBO_3:Pr^{3+}$; $YBO_3:Pr^{3+}$; $GdBO_3:Pr^{3+}$; $LuBO_3:Pr^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+}$; $SrB_4O_7:Pr^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+}$; $YPO_4:Pr^{3+}$; $GdPO_4:Pr^{3+}$; $Y_2SiO_5:Pr^{3+}$; $YPO_4:Bi^{3+}$; $LuPO_4:Bi^{3+}$; $(Ca,Mg,Sr)SO_4:Pb^{2+}$; $CaLi_2SiO_4:Pb^{2+}$; $(Ca,Ba,Sr)SiO_3:Pb^{2+}$; $Ba(Y,Gd,Lu)B_9O_{16}:Bi^{3+}$; $YF_3:Bi^{3+}$; $YOF:Bi^{3+}$; $(Gd,Y)OF:Bi^{3+},Pr^{3+}$; $(Y,Gd)_3Al_5O_{12}:Bi^{3+}$; and combinations thereof.

[c13] The light source according to claim 5, wherein said at least a second phosphor absorbs a portion of radiation emitted by said plasma discharge that has wavelengths longer than about 200 nm and radiation emitted by said at least a first phosphor, and said at least a second phosphor emits visible light.

[c14] The light source according to claim 13; wherein said at least a second phosphor is selected from the group consisting of $BaMg_2Al_{16}O_{27}:Eu^{2+}$; $CeMgAl_{11}O_{19}:Tb^{3+}$; $Y_2O_3:Eu^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$; $(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$; $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; $Sr_4Al_{14}O_{25}:Eu^{2+}$; $BaAl_8O_{13}:Eu^{2+}$; $2SrO{\bullet}0.84P_2O_5{\bullet}0.16B_2O_3:Eu^{2+}$; $MgWO_4$; $BaTiP_2O_8$; $(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+},Mn^{2+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; $LaPO_4:Ce^{3+},Tb^{3+}$; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}, Mn^{2+}; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}; $(Tb,Y,Lu,La,Gd)_3$ $(Al,Ga)_5O_{12}:Ce^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$, Mn^{2+}, Sb^{3+}; $(Y,Gd,La,Lu,Sc)_2O_3:Eu^{3+}$; $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$; $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$; $(Ba,Sr,Ca)(Y,Gd,La,Lu)_2O_4:Eu^{3+}$; $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$; monoclinic $Gd_2O_3:Eu^{3+}$; $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$; $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$; $(Sr,Mg)_3(PO_4)_2:Sn^{2+}$; $GdMgB_5O_{10}:Ce^{3+},Mn^{2+}$; $3.5MgO{\cdot}0.5MgF_2{\cdot}GeO_2:Mn^{4+}$; and combinations thereof.

[c15] The light source according to claim 5, wherein said light source is selected from the group consisting of fluorescent lamps, compact fluorescent lamps, and electrodeless fluorescent lamps.

[c16] A light source comprising:

a source of plasma discharge that emits EM radiation, a portion of which has wavelengths shorter than about 200 nm, said source of plasma discharge being contained in a sealed housing and comprising mercury gas, which produces said plasma discharge upon application of a voltage across said mercury gas; and

a phosphor composition that comprises a plurality of particles of at least a first phosphor and a plurality of particles of at least a second phosphor, wherein said particles of said at least a first phosphor have a nanometer size, each of particles of said at least a second phosphor is coated with particles of said at least a first phosphor, said phosphor composition is disposed such that said first phosphor absorbs substantially said portion of EM radiation having wavelengths shorter than about 200 nm, and said first phosphor emits EM radiation having wavelengths longer than about 200 nm;

wherein said particles of said at least a first phosphor have a size in a range from about 1 nm to about 500 nm;

said particles of said at least a second phosphor have a size in a range from about 2 micrometers to about 6 micrometers;

said at least a first phosphor is selected from the group consisting of $LaPO_4:Pr^{3+}$; $LaB_3O_6:Pr^{3+}$; $LaBO_3:Pr^{3+}$; $YBO_3:Pr^{3+}$; $GdBO_3:Pr^{3+}$; $LuBO_3:Pr^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+}$; $SrB_4O_7:Pr^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+}$; $YPO_4:Pr^{3+}$; $GdPO_4:Pr^{3+}$; $Y_2SiO_5:Pr^{3+}$; $YPO_4:Bi^{3+}$; $LuPO_4:Bi^{3+}$; $LaPO_4:Pb^{2+}$; $LaB_3O_6:Pb^{2+}$; $LaBO_3:Pb^{2+}$; $YBO_3:Pb^{2+}$;

$GdBO_3:Pb^{2+}$; $LuBO_3:Pb^{2+}$; $(Gd,Y)B_3O_6:Pb^{2+}$; $(Sr,Ca)Al_{12}O_{19}:Pb^{2+}$; $(La,Gd,Y)MgB_5O_{10}:Pb^{2+}$; $SrB_4O_7:Pb^{2+}$; $CaMgAl_{11.33}O_{19}:Pb^{2+}$; $CaMgAl_{14}O_{23}:Pb^{2+}$; $YPO_4:Pb^{2+}$; $GdPO_4:Pb^{2+}$; $Y_2SiO_5:Pb^{2+}$; $YPO_4:Pb^{2+}$; $LuPO_4:Pb^{2+}$; $LaPO_4:Pr^{3+},Pb^{2+}$; $LaB_3O_6:Pr^{3+},Pb^{2+}$; $LaBO_3:Pr^{3+},Pb^{2+}$; $YBO_3:Pr^{3+},Pb^{2+}$; $GdBO_3:Pr^{3+},Pb^{2+}$; $LuBO_3:Pr^{3+},Pb^{2+}$; $(Gd,Y)B_3O_6:Pr^{3+},Pb^{2+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+},Pb^{2+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+},Pb^{2+}$; $SrB_4O_7:Pr^{3+},Pb^{2+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+},Pb^{2+}$; $CaMgAl_{14}O_{23}:Pr^{3+},Pb^{2+}$; $YPO_4:Pr^{3+},Pb^{2+}$; $GdPO_4:Pr^{3+},Pb^{2+}$; $Y_2SiO_5:Pr^{3+},Pb^{2+}$; $YPO_4:Bi^{3+},Pb^{2+}$; $LuPO_4:Bi^{3+},Pb^{2+}$; $LaPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $LaB_3O_6:Pr^{3+},Pb^{2+},Bi^{3+}$; $LaBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $YBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $GdBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $LuBO_3:Pr^{3+},Pb^{2+},Bi^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+},Pb^{2+},Bi^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+},Pb^{2+},Bi^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+},Pb^{2+},Bi^{3+}$; $SrB_4O_7:Pr^{3+},Pb^{2+},Bi^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+},Pb^{2+},Bi^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+},Pb^{2+},Bi^{3+}$; $YPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $GdPO_4:Pr^{3+},Pb^{2+},Bi^{3+}$; $Y_2SiO_5:Pr^{3+},Pb^{2+},Bi^{3+}$; $YPO_4:Pr^{3+},Bi^{3+},Pb^{2+}$; $LuPO_4:Pr^{3+},Bi^{3+},Pb^{2+}$; $(Ca,Mg,Sr)SO_4:Pb^{2+}$; $CaLi_2SiO_4:Pb^{2+}$; $(Ca,Ba,Sr)SiO_3:Pb^{2+}$; $Ba(Y,Gd,Lu)B_9O_{16}:Bi^{3+}$; $YF_3:Bi^{3+}$; $YOF:Bi^{3+}$; $(Gd,Y)OF:Bi^{3+},Pr^{3+}$; $(Y,Gd)_3Al_5O_{12}:Bi^{3+}$; and combinations thereof; and

said at least a second phosphor emits visible light and is selected from the group consisting of $BaMg_2Al_{16}O_{27}:Eu^{2+}$; $CeMgAl_{11}O_{19}:Tb^{3+}$; $Y_2O_3:Eu^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$; $(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$; $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; $Sr_4Al_{14}O_{25}:Eu^{2+}$; $BaAl_8O_{13}:Eu^{2+}$; $2SrO{\bullet}0.84P_2O_5{\bullet}0.16B_2O_3:Eu^{2+}$; $MgWO_4$; $BaTiP_2O_8$; $(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+},Mn^{2+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; $LaPO_4:Ce^{3+},Tb^{3+}$; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}, Mn^{2+}; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}; $(Tb,Y,Lu,La,Gd)_3$ $(Al,Ga)_5O_{12}:Ce^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$, Mn^{2+}, Sb^{3+}; $(Y,Gd,La,Lu,Sc)_2O_3:Eu^{3+}$; $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$; $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$; $(Ba,Sr,Ca)(Y,Gd,\ La,Lu)_2O_4:Eu^{3+}$; $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$; monoclinic $Gd_2O_3:Eu^{3+}$; $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$; $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$; $(Sr,Mg)_3(PO_4)_2:Sn^{2+}$; $GdMgB_5O_{10}:Ce^{3+},Mn^{2+}$; $3.5MgO{\cdot}0.5MgF_2{\cdot}GeO_2:Mn^{4+}$; and combinations thereof.

[c17] A light source comprising:

a source of plasma discharge that emits EM radiation, a portion of which has wavelengths shorter than about 200 nm, said source of plasma discharge being contained in a sealed housing and comprising mercury gas, which produces said plasma discharge upon application of a voltage across said mercury gas; and

a phosphor composition that comprises a plurality of particles of at least a first phosphor and a plurality of particles at least a second phosphor, wherein said particles of said at least a first phosphor have a nanometer size, each of particles of said at least a second phosphor is coated with particles of said at least a first phosphor, said phosphor composition is disposed such that said first phosphor absorbs substantially said portion of EM radiation having wavelengths shorter than about 200 nm, and said first phosphor emits EM radiation having wavelengths longer than about 200 nm;

wherein said particles of said at least a first phosphor have a size in a range from about 1 nm to about 500 nm;

said particles of said at least a second phosphor have a size in a range from about 2 micrometers to about 6 micrometers;

said at least a first phosphor is selected from the group consisting of $LaPO_4:Pr^{3+}$; $LaB_3O_6:Pr^{3+}$; $LaBO_3:Pr^{3+}$; $YBO_3:Pr^{3+}$; $GdBO_3:Pr^{3+}$; $LuBO_3:Pr^{3+}$; $(Gd,Y)B_3O_6:Pr^{3+}$; $(Sr,Ca)Al_{12}O_{19}:Pr^{3+}$; $(La,Gd,Y)MgB_5O_{10}:Pr^{3+}$; $SrB_4O_7:Pr^{3+}$; $CaMgAl_{11.33}O_{19}:Pr^{3+}$; $CaMgAl_{14}O_{23}:Pr^{3+}$; $YPO_4:Pr^{3+}$; $GdPO_4:Pr^{3+}$; $Y_2SiO_5:Pr^{3+}$; $YPO_4:Bi^{3+}$; $LuPO_4:Bi^{3+}$; $(Ca,Mg,Sr)SO_4:Pb^{2+}$; $CaLi_2SiO_4:Pb^{2+}$; $(Ca,Ba,Sr)SiO_3:Pb^{2+}$; $Ba(Y,Gd,Lu)B_9O_{16}:Bi^{3+}$; $YF_3:Bi^{3+}$; $YOF:Bi^{3+}$; $(Gd,Y)OF:Bi^{3+},Pr^{3+}$; $(Y,Gd)_3Al_5O_{12}:Bi^{3+}$; and combinations thereof; and

said at least a second phosphor emits visible light and is selected from the group consisting of $BaMg_2Al_{16}O_{27}:Eu^{2+}$; $CeMgAl_{11}O_{19}:Tb^{3+}$; $Y_2O_3:Eu^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$; $(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+}$; $(Ba,Sr,Ca)BPO_5:Eu^{2+}$; $Sr_4Al_{14}O_{25}:Eu^{2+}$; $BaAl_8O_{13}:Eu^{2+}$; $2SrO{\bullet}0.84P_2O_5{\bullet}0.16B_2O_3:Eu^{2+}$; $MgWO_4$; $BaTiP_2O_8$;

$(Ba,Sr,Ca)MgAl_{10}O_{17}:Eu^{2+},Mn^{2+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Sb^{3+}$; $LaPO_4:Ce^{3+},Tb^{3+}$; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}, Mn^{2+}; $GdMgB_5O_{10}:Ce^{3+}$, Tb^{3+}; $(Tb,Y,Lu,La,Gd)_3$ $(Al,Ga)_5O_{12}:Ce^{3+}$; $(Ba,Sr,Ca)_5(PO_4)_3(Cl,F,OH):Eu^{2+}$, Mn^{2+}, Sb^{3+}; $(Y,Gd,La,Lu,Sc)_2O_3:Eu^{3+}$; $(Y,Gd,La,In,Lu,Sc)BO_3:Eu^{3+}$; $(Y,Gd,La)(Al,Ga)O_3:Eu^{3+}$; $(Ba,Sr,Ca)(Y,Gd,\ La,Lu)_2O_4:Eu^{3+}$; $(Y,Gd)Al_3B_4O_{12}:Eu^{3+}$; monoclinic $Gd_2O_3:Eu^{3+}$; $(Gd,Y)_4(Al,Ga)_2O_9:Eu^{3+}$; $(Ca,Sr)(Gd,Y)_3(Ge,Si)Al_3O_9:Eu^{3+}$; $(Sr,Mg)_3(PO_4)_2:Sn^{2+}$; $GdMgB_5O_{10}:Ce^{3+},Mn^{2+}$; $3.5MgO{\cdot}0.5MgF_2{\cdot}GeO_2:Mn^{4+}$; and combinations thereof.

[c18] A method for making a light source, said method comprising:

providing a source of plasma discharge that emits EM radiation, a portion of which has wavelengths shorter than about 200 nm;

containing said source of plasma discharge in a sealed housing; and

disposing a phosphor composition in said sealed housing, which phosphor composition comprises a plurality of particles, each of said particle comprising at least a first phosphor and at least a second phosphor, said at least a first phosphor being disposed on each particle of said second phosphor, and said phosphor composition being disposed such that said first phosphor absorbs substantially said portion of EM radiation having wavelengths shorter than about 200 nm, and said first phosphor emitting EM radiation having wavelengths longer than about 200 nm.

[c19] The method according to claim 18, wherein said source of plasma discharge comprises mercury gas, which produces a plasma discharge upon application of a voltage across said mercury gas.

[c20] The method according to claim 19, wherein said providing said plasma source comprises providing an amount of mercury sufficient to maintain a mercury vapor pressure of about 0.8 Pa at a temperature of about 40 C.

[c21] A method for making a light source, said method comprising:

providing an envelope made of a material that is substantially transparent;

depositing a layer of a phosphor composition on an inner surface of said envelope, said phosphor composition comprising a plurality of particles, each of said particles comprising at least a first phosphor and at least a second phosphor, said at least a first phosphor forming a coating around each of particles of said at least a second phosphor;

evacuating said envelope to provide an evacuated envelope having said layer of said phosphor composition thereon;

adding a first amount of mercury and a second amount of an inert gas into said evacuated envelope;

providing a means for generating a plasma discharge from said mercury and said inert gas; and

sealing said envelope to produce said light source.

[c22] The method according to claim 21, wherein said forming a coating comprises depositing a plurality of nanometer-sized particles of said first phosphor around each particle of said second phosphor.

[c23] The method according to claim 22, wherein said first amount of mercury is sufficient to maintain a mercury vapor pressure of about 0.8 Pa at a temperature of about 40 C.

[c24] A phosphor composition comprising a plurality of particles, each of said particles comprising at least a first phosphor and at least a second phosphor, said first phosphor being capable of absorbing EM radiation having wavelengths shorter than about 200 nm, and being capable of emitting EM radiation having wavelengths longer than about 200 nm.

[c25] The phosphor composition of claim 24, wherein said first phosphor comprises a plurality of nanometer-sized particles, that are disposed around a particle of said second phosphor.

[c26] The phosphor composition of claim 24, wherein said first phosphor comprises a shell around a particle of said second phosphor.